### CALIFORNIA WATER QUALITY MONITORING COUNCIL

# **Monitoring Council Meeting Notes**

Wednesday, December 10, 2014 - 10:00 AM to 4:30 PM

Second Floor, Klamath Room Joe Serna Jr. Cal/EPA Headquarters Building 1001 I Street, Sacramento



#### Monitoring Council Members and (Alternates) in attendance:

(Sean Bothwell) Sarge Green (Ken Schiff) Beth Christman Parry Klassen (Stephani Spaar)

(Greg Gearheart) Armand Ruby

### Others in attendance or (on the phone):

Megan Brooks, Delta Stewardship Council Lita Brydie, Delta Stewardship Council Maggie Christman, Delta Science Program Cristina Grosso, San Francisco Estuary Institute Tony Hale, San Francisco Estuary Institute Yumiko Henneberry, Delta Science Program

Rainer Hoenicke, Delta Science Program

Bruce Houdesheldt, Northern California Water Association's

Kris Jones, California Water Quality Monitoring Council / Department of Water Resources

(Dawn Koepke, McHugh, Koepke & Associates)

Jim Markle, Coalition For Urban/Rural Environmental Stewardship

Jon Marshack, California Water Quality Monitoring Council / State Water Board

Bill Orme, State Water Resources Control Board

Amye Osti, 34 North

Dave Osti, 34 North

(Haley Stewart, Defenders of Wildlife)

Michelle Tang, State Water Resrouces Control Board

(Doug Titus, Santa Clara Valley Water District)

Lori Webber, State Water Resources Control Board

Johanna Weston, State Water Resources Control Board

ITEM:	1	
Title of Topic:	INTRODUCTIONS AND HOUSEKEEPING	
Purpose:	Introductions (in the room and on the phone)	
	2) Review draft notes from September 3, 2014 Monitoring Council meeting	
	3) Review agenda for today's meeting	
Desired Outcome:	a) Approve September 3, 2014 Monitoring Council meeting notes	
	b) Preview what will be covered today and overall meeting expectations	
	c) Adjust today's agenda, as needed	
Attachment Link:	Notes from September 3, 2014 Council meeting	

Contact Persons:	Kris Jones Jon Marshack	kristopher.jones@water.ca.gov, (916) 376-9756 jon.marshack@waterboards.ca.gov, (916) 341-5514
Decisions:	Meeting notes for September 3 were approved without amendment	

ITEM:	2	
Title of Topic:	ANNOUNCEMENTS AND UPDATES	
Purpose:	These are brief informational items that could be expanded into more detailed discussions for future meetings:	
	a) Welcome Greg Gearheart, new Alternate for Co-Chair Jonathan Bishop (Jon Marshack)	
	b) Monitoring Council Governance changes for Drinking Water Program (Jon Marshack)	
	c) Welcome Karen Larsen as new Member representing Drinking Water Program (Jon Marshack)	
	d) Departure of Co-Chair Paul Helliker (Stephani Spaar)	
	e) Potential workgroup for harmful algal blooms (HABs) and cyanotoxins (Jon Marshack)	
	f) Presentation to the Delta Stewardship Council (Jon Marshack)	
	g) Monitoring Council Meeting dates for 2015 (Jon Marshack)	
Desired Outcome:	Information and comment	
	Approve proposed Governance changes	
	Authorize formation of a Harmful Algal Bloom and Cyanotoxin Workgroup	
	Approve meeting dates for 2015	
Background:	a) Greg Gearheart – With Karen Larsen's move to the Division of Drinking Water, Greg Gearheart has been selected as the new State Water Board Deputy Director for the Office of Information Management and Analysis. Monitoring Council Co-Chair Jonathan Bishop has selected Greg to be his Alternate on the Monitoring Council.	
	b) Governance – The existing Monitoring Council Governance document names one Member to represent the California Department of Public Health, largely due to the fact that the Department housed the Drinking Water Program. Pursuant to Governor Brown's direction and recent legislation, California's Drinking Water Program moved from the Department of Public Health on July 1, 2014 to form the new Division of Drinking Water within the State Water Resources Control Board. Proposed changes to the Governance document would reassign this Monitoring Council Member from representing the Department of Public Health to instead represent the Division of Drinking Water.	
	c) Karen Larsen – Karen Larsen, former Monitoring Council Co-Chair representing Cal/EPA has accepted an Assistant Deputy Director position	

within the new Division of Drinking Water. As head of the Division of Drinking Water, Deputy Director Cindy Forbes has selected Karen to represent the Division on the Monitoring Council. A <u>nomination letter</u> was sent to the Agency Secretaries on October 9, 2015.

- d) **Paul Helliker** On November 17, Department of Water Resources Director Mark Cowin released a <u>memorandum</u> stating that Monitoring Council Co-Chair Paul Helliker had resigned from his position as Deputy Director of Delta and Statewide Water Management at DWR.
- e) HABs & Cyanotoxins There is increasing interest in the effects of harmful algal blooms and the toxic chemicals that they produce, including impacts on marine life, swimming safety, domestic animals, and drinking water systems. A recent shut down of the drinking water system for the city of Toledo, Ohio due to a harmful algal bloom in Lake Erie has heightened awareness of this issue. A number of groups have formed in California to study HABs and cyanotoxins. Recently, the Surface Water Ambient Monitoring Program of the State Water Board committed funding to study HABs in California waters. The Monitoring Council's Comprehensive Monitoring Program Strategy included consideration of forming one or more workgroups to address the question, "What stressors and processes affect our water quality?" The Monitoring Council was asked to consider whether a workgroup of the Council should be formed to coordinate monitoring, assessment, and reporting of HABs and cyanotoxins.
- f) Delta Stewardship Council On October 30, Jon Marshack and Rainer Hoenicke addressed the Delta Stewardship Council to inform them about the Monitoring Council, our strategy to address problems related to uncoordinated monitoring and assessment and access to water quality and aquatic ecosystem health data, our workgroups, the progress we have made, and the challenges we face. The Delta Stewardship Council meeting was held on the third morning of the biennial Bay-Delta Science Conference in Sacramento. Posters on the Estuary and Wetland workgroups, portals, and tools were displayed during the conference.
- g) 2015 Meetings Monitoring Council Members, Alternates, and EPA Liaison were polled via email regarding potential dates for meetings in 2015. Proposed quarterly meeting dates were selected for late in the month to avoid potential conflicts. The following dates were tentatively selected:
  - Monday, February 23, 2015 Sacramento
  - Friday, May 29, 2015 Costa Mesa
  - Thursday, August 27, 2015 Sacramento
  - Monday, November 30, 2015 Sacramento

## **Attachment Links:**

- b) Proposed amendments to the Monitoring Council's governance document
- c) <u>Letter to Agency Secretaries Recommending Karen Larsen to represent the Division of Drinking Water on the Monitoring Council</u>
- d) <u>DWR Organizational Changes</u> memorandum from Mark Cowin of the Department of Water Resources
- e) Harmful Algal Blooms and Cyanotoxins presentation by Jon Marshack
- f) California Water Quality Monitoring Council: Toward an Integrated Monitoring and Assessment Framework presentation by Rainer Hoenicke and Jon

	Marshack to the De	elta Stewardship Council
Comtant Down		· 
Contact Persons:	Jon Marshack	jon.marshack@waterboards.ca.gov, (916) 341-5514
	Kris Jones	kristopher.jones@water.ca.gov, (916) 376-9756
Notes:	<ul> <li>a) Greg Gearheart – Jon Marshack provided a brief update regarding Karen Larsen's move to the State Water Board's Division of Drinking Water. Jon also introduced Greg Gearheart, who was selected by Monitoring Council Co-Chair Jonathan Bishop to be his Alternate on the Monitoring Council. Greg provided the Council members an overview of his academic and professional backgrounds.</li> <li>b) Governance – Jon Marshack discussed the existing Monitoring Council Governance document. Pursuant to Governor Brown's direction and recent legislation, California's Drinking Water Program moved from the Department of Public Health on July 1, 2014 to form the new Division of Drinking Water within the State Water Resources Control Board. Proposed changes to the Governance document would reassign the Monitoring Council Member representing the Department of Public Health to instead represent the Division of Drinking Water. Ken Schiff asked whether we would be sacrificing anything by not having the Department of Public Health (DPH) represented on the Council. Even though DPH still includes programs for shellfish and swimming safety, Jon did not thinks so, stating that previously the DPH only had the Drinking Water Program involved in in Monitoring Council related efforts. Sean Bothwell asked, without a representative on the Council, would DPH staff have less incentive to be involved in the workgroups. Again, Jon did not think that would be an issue, as the other DPH programs could be involved through the Monitoring Council's workgroups. The motion to make the amendments was raised by Sean Bothwell and seconded by Ken Schiff. The motion was approved with none opposed.</li> </ul>	
	Karen Larsen's new Division of Drinking Cindy Forbes, Dep Drinking Water, ha Monitoring Council Division's three Ast the Agency Secreta not heard back from that we can assum will be Bruce Burto Program while at the for an update on the explained that the vorinking Water Prodrinking water data. The workgroup is voccur in late 2015.	on Marshack updated the Monitoring Council regarding w position as an Assistant Deputy Director within the new g Water at the State Water Resources Control Board. The Uty Director of the State Water Board for the Division of selected Karen to represent the Division on the selected Karen to represent the Division of the had in the Agency Secretaries within the 30-day review period, the that this change has been approved. Karen's Alternate in, who previously represented the Drinking Water in Department of Public Health. Sarge Green asked Jon workgroup has encountered some delays, due to the orgam's move from DPH to the State Water Board. The infrastructure is undergoing changes related to the move. The validing for the infrastructure issues to be resolved before lans to build and house the portal at the SWRCB will likely exphani Spaar informed the Council that on November 17,
		er Resources Director Mark Cowin released a

memorandum stating that Monitoring Council Co-Chair Paul Helliker had resigned from his position as Deputy Director of Delta and Statewide Water Management at DWR. Stephani indicated that she and DWR management will likely identify a replacement in the New Year. Ken Schiff asked whether there were any potential opportunities (from the Monitoring Council's perspective) for whomever DWR selects to replace Paul on the Council. Stephani indicated that the replacement would likely deal with statewide issues, rather than having a Delta focus, which would be a good thing for the Council. Jon Marshack added that he thought it would be helpful to have someone who is linked to the State Water Plan, due to the overlap with Monitoring Council efforts.

e) **HABs & Cyanotoxins** – Jon provided a presentation regarding current efforts researching harmful algal blooms and cyanotoxins in California as well as the groups currently involved in those efforts. Jon discussed how these research and monitoring efforts concern multiple of the Monitoring Council's workgroups. During his presentation, Jon provided background regarding the California CyanoHAB Network (CCHAB), and discussed the possibility of asking the CCHAB to become a workgroup of the Monitoring Council; with the Monitoring Council's consent, Jon plans to propose this to the CCHAB at their next meeting on December 18. He also suggested that the workgroup could develop a portal under the 'What stressors and processes affect our water quality?" section within MyWaterQuality.ca.gov. Following the presentation, Sarge Green asked whether Jon and Kris Jones have the capacity to oversee another workgroup. He asked whether this theme could fit within another/multiple workgroup(s). Jon felt that this issue is ripe for its own workgroup, and that he and Kris would have sufficient time to develop such a workgroup. He added that since the CCHAB is already formed, that it would not be difficult to transition the group into a workgroup of the Monitoring Council. In terms of fitting into another workgroup, Jon thought that the subject falls under many areas, and that one specific group does not stand out as the best fit. Sarge added that he liked the possibilities regarding visualization of the data (e.g., NOAA satellite data). Armand asked about the current structure of CCHAB, and whether they have dedicated funding. Jon said that CCHAB currently does not have dedicated funding, although Johanna Weston (State Water Board) has been assigned as the lead for CCHAB, and that there are dedicated funds at the Office of Environmental Health Hazard Assessment (OEHA) and through the Surface Water Ambient Monitoring Program (SWAMP) for cyanotoxin and HABs related work. There is also considerable interest in the Drinking Water Program, and there is potential to attract funding to the group. Johanna added that the group is composed of 40-60 members, and that currently they do not have a defined structure. The group has considered forming a steering committee and subgroups, but has yet to do so. Ken asked Jon how he plans to approach the CCHAB at their meeting. Jon mentioned that he would approach the group by providing background on the Monitoring Council, its workgroups. and portals. He would emphasize the benefits as well (e.g., more exposure). Ken asked Johanna how the group would respond to the proposal. She indicated that the Monitoring Council has a good structure, from which the CCHAB would likely benefit. She added that having a portal would help serve to get the group's information out to the public and decision makers, and that the question driven approach of the portals would work well for the CCHAB. She added that though she could not speak for the group, she

	rought that they would be open to the suggestion ouncil. Jon asked whether the Monitoring Country approaching the CCHAB Network regarding to the Monitoring Council. The motion to authorize peroach the CCHAB regarding joining the Monitormand Ruby and seconded by Ken Schiff. The pone opposed.	cil members approved of heir becoming a workgroup e Jon Marshack to pring Council was raised by
	relta Stewardship Council – Jon Marshack info ouncil that at the invitation of Rainer Hoenicke, I elta Stewardship Council to inform them about to forts and the Triennial Audit findings. Jon also ones presented posters at the Bay Delta Science ontained information on the Estuary and Wetland 1015 Meetings – All of the proposed meeting dat	ne recently addressed the he Monitoring Council's mentioned that he and Kris e Conference, which d workgroups.
Decisions:	roposed amendments to the Monitoring Council ere approved.	's Governance document
	on Marshack was authorized to approach the Ca CCHAB) regarding the possibility of having them lonitoring Council.	<u> </u>
	leeting dates were approved for 2015.	

ITEM:	3	
Title of Topic:	DEVELOPING MONITORING COUNCIL RECOMMENDATIONS FOR WATER QUALITY IMPROVEMENT PROJECTS	
Purpose:	Discussion of the scope of this topic	
Desired Outcome:	Direction on the desired scope of future Monitoring Council recommendations	
Background:	One aspect of the enabling legislation, <u>SB 1070</u> , specifically Water Code Section 13181(a)(6)(B), requires the Monitoring Council to provide recommendations to the Agency Secretaries to "Ensure that water quality improvement projects financed by the state provide specific information necessary to track project effectiveness with regard to achieving clean water and healthy ecosystems." To date, the Monitoring Council has heard from the Water Boards and the Department of Water Resources regarding their efforts to improve the effectiveness of monitoring and reporting for water quality improvement projects, but Monitoring Council recommendations have yet to be developed. Recently, staff of the Delta Science Program have questioned whether potential recommendations from the Monitoring Council should also include habitat restoration projects, such as those funded through:	
	<ul> <li>Ecosystem Restoration Program (CDFW)</li> <li>Bay-Delta Conservation Plan</li> <li>State Coastal Conservancy</li> <li>SF Bay Conservation and Development Commission</li> <li>Joint Ventures habitat restoration (waterfowl)</li> <li>So Cal Wetland Recovery Project (SCCWRP)</li> </ul>	

	Recently approved Proposition 1 Water Bond	
Attachment Links:	<ul> <li>Recommendations for Water Quality Improvement Projects – presentation by Jon Marshack</li> <li>CA Senate Bill 1070 (Kehoe, 2006)</li> </ul>	
Contact Person:	Jon Marshack jon.marshack@waterboards.ca.gov, (916) 341-5514	
Notes:	Jon Marshack provided a presentation regarding expanding the Monitoring Council's focus to include ecosystem restoration projects. Sarge Green asked whether we could incorporate this type of information into the existing portals. Jon responded that the Safe-to-Swim currently provides map-based access to Clean Beaches Initiative grant project information; but the existing data infrastructure makes it difficult to automate this reporting. If expanding the scope of these efforts would require much more time for the staff of the Monitoring Council (i.e., Jon Marshack and Kris Jones), Sarge thought that this may be difficult to manage, e.g., developing common performance metrics.  Jon mentioned that there are a number of workgroups that focus on habitat improvement projects (Wetlands, Estuaries, Healthy Streams, and Ocean). However, he agreed with Sarge's assessment that taking on development of recommendations for these types of projects would be difficult given his and Kris's current workload. Jon added that he thought it might be better to take this on at a later date. Parry Klassen asked whether these ecosystem restoration projects have monitoring components. Jon mentioned that many funded projects have requirements that measure effectiveness, but few actually measure water quality. Beth Christman added that the problem with tying effectiveness measuring requirements to grants is that they are often ineffective because grant project timing runs out before environmental outcome improvements could be adequately measured.  Stephani Spaar mentioned that ecosystem restoration has been a huge focus in the Delta, and that these efforts will continue to increase. She urged caution, given the considerable amount of work associated with these types of projects. Armand Ruby asked whether expanding our focus to include these types of projects could be considered 'mission creep' (referring to the Monitoring Council's focus on 'water quality improvement projects'). Jon reminded the group that beneficial uses of water also inc	
	Ken Schiff suggested rewording the motion to focus on direct water quality improvement project grants managed by the Department of Water Resources and the Water Boards. The motion was seconded by Parry Klassen, and was approved with none opposed.	
Decisions:	At this time, the Monitoring Council will not expand their focus to include ecosystem restoration projects.	

ITEM:	4		
Title of Topic:	DELTA STEWARDSHIP COUNCIL, ENVIRONMENTAL DATA SUMMIT WHITE PAPER		
Purpose:	Rainer Hoenicke of the Delta Science Program of the Delta Stewardship Council presented an overview of the white paper entitled, <i>Enhancing the Vision for Managing California's Environmental Information</i> , which arose from the two-day Environmental Data Summit held in early June 2014 in Davis and Sacramento.		
Desired Outcome:	Information and comment		
Background:	The Environmental Data Summit brought together leaders from academia, government agencies, non-profit organizations, and the private sector representing California's varied interests in the effective management of environmental data. This document is intended to be consistent with and support national trends, enhance California's existing initiatives and lay the foundation for creating the capacity to facilitate access to data and metadata across organizational boundaries and develop shared web services.		
	On November 17, Members of the Monitoring Council and other key individuals were sent a preliminary draft of the white paper and asked to provide comments to Delta Science Program staff by December 1. After comments have been received and reviewed, the Delta Science Program plans to post a public draft for review on or about December 8.		
Attachment Links:	<ul> <li>Delta Science Vision: Sustaining Data Integration Efforts while Taking         Advantage of Constantly Evolving Technology – presentation by Rainer         Hoenicke</li> <li>2014 Environmental Data Summit website</li> </ul>		
Contact Persons:	Rainer Hoenicke rainer.hoenicke@deltacouncil.ca.gov, (916) 445-5825		
Notes:	Rainer Hoenicke of the Delta Science Program (DSP) presented the Environmental Data Summit's White Paper. During his presentation, Rainer mentioned that the Delta Stewardship Council (DSC) is interested in becoming more engaged with the activities of the Monitoring Council. Rainer referred to numerous DSC staff in attendance, who will be getting caught up to speed regarding the Monitoring Council's activities, and who will start to build on existing collaborations between the DSC and the Monitoring Council. DSC could help with business plan development by the Monitoring Council workgroups.  Rainer started by going over a brief history of the DSC. He mentioned that when CALFED was disbanded, that there was a need for an agency to fill the gap between the mandates of other agencies. Due to the interactive effects of a number of stressors, there was a sense that there needed to be a way to integrate and synthesize information that goes across agency boundaries (e.g., the Department of Water Resources has a different focus than the State Water		
	Resources Control Board).  When asked to put on the Environmental Data Summit, the DSC was responding to a charge by the National Research Council (2012), in which they stated that 'Only a synthetic, integrated, analytical approach to understanding the effects of suites of environmental factors [stressors] on the ecosystem and its components is likely to provide important insights that can lead to the enhancement of the		

Delta and it species.' Because the Monitoring Council has a statewide charge, the DSP thought that we would be able to provide a more in depth view of data exchange (not just a Delta focus); he added that this broader perspective was important for the organization of the Data Summit, as well as the White Paper.

Rainer said that the DSC wanted to start at a high level with the White Paper regarding how California manages environmental data (in order to meet the charge of the National Research Council). During the first day of the Summit, there were in depth discussions regarding data integration. Topics included the evolving expectations for "transparency", data quality standards and documentation, heterogeneous data, unanticipated costs, and the lack of cooperation and coordination. During the Summit, there were also discussions regarding a path forward, relating to subjects such as metadata standards, the benefits of using open-source software, and data quality standards.

Rainer emphasized that the White Paper was not meant to be prescriptive. They did not seek to make recommendations to require that data management plans be included in grant agreements, for example. He added that the DSP does not plan to be the implementing organization for these efforts. Rather, he mentioned that the intent was to elicit some thought in this area (e.g., from managers and the legislature). Rainer added that one issue that they face is that these efforts do not have a clearly communicated value. He added that the White Paper tries to address this, but there is more work to do in this area. He mentioned that they will try and identify user's needs, for example, by conducting a market segmentation analysis.

Following Rainer's presentation, Jon Marshack added that he thinks that there is a strong connection between the goals of the White Paper and those of the Monitoring Council. He added that many of the recommendations in the White Paper parallel those listed in the Monitoring Council's 2008 Initial Recommendations report and the 2010 Monitoring Program Strategy. The Monitoring Council's Data Management Workgroup has already developed interagency relationships that could position the workgroup to aid implementation.

Rainer mentioned that before they go public with the document, they are asking key stakeholders to review the document and provide comments, so that it will be suitable for a diverse audience (managers, IT staff, etc.). One of the comments that the DSC higher level management provided was that the document currently does not have any tangible recommendations. This was intentional, Rainer added. They did not want groups to be locked into something that may not be feasible.

Rainer mentioned that their plan is to have the document released for public review in early January, and have the document finalized by the end of January 2015 (to be in sync with the legislative session). Rainer asked George Isaac and Tony Hale whether they had anything to add. Tony mentioned that he is glad that the document is complimentary to the Monitoring Council's Recommendations and Strategy. He added that the document was not meant to be a magic bullet. Rather, it was meant to help spark conversations and help chart a dynamic path forward. Jon added that he is hoping that this document will get enough interest in the legislature and administration, as they have the power to implement these recommendations.

Greg Gearheart asked how much they considered state limitations when developing the document; he added that the state currently has some constraints

with using open source software, for example. Rainer mentioned that they did consider these types of issues. Their recommendations were meant to elicit paradigm shifts. Greg added that he wondered whether the document targets those constraints explicitly. Rainer responded by saying that the authors did not do this, as they did not want to put different entities on the defensive. Tony added that as a vision document, they wanted to reach consensus as much as possible and acknowledge these key points. Jon mentioned that a number of the workgroups have used open source software; however, he added that the Monitoring Council has fewer limitations in this area than do many state agencies or departments.

Rainer asked whether the Monitoring Council has any direction or recommendations for the document. He also asked whether the Monitoring Council would formally endorse the documents. Jon added that he thought having the Monitoring Council's endorsement will help their effort. However, he mentioned that his only concern with providing an endorsement was that the Monitoring Council will not meet again until after the final draft has been released. Rainer suggested that that the document be sent via the Monitoring Council's Lyris listserv for the public release.

Armand asked about the potential impact of the White Paper. Jon reminded the group that the impetus of the Summit was AB378, which was intended to break down the current silos of monitoring and research data collected in the Sacramento-San Joaquin Delta. Jon added that the legislature held back on pursuing this legislation until they could assess the outcome of the Data Summit—AB378 was a shot across the bow. Armand asked whether there were any plans to publicize the release of the White Paper. Rainer indicated that this was on their radar and that they will handle publicity for the document's release. Possible targets would include the Department of Technology, the legislature, agency heads, the California Council on Science & Technology, and the Strategic Growth Council.

During the lunch break, Rainer asked Jon to request that the Monitoring Council consider providing their endorsement for the White Paper at this meeting, since the Monitoring Council will not meet again until after the final version of the White Paper is released. Jon indicated that even though the document still needs to be finalized, its overall message is compatible with the Monitoring Council's. After the lunch break, he asked the Monitoring Council members whether they would be willing to endorse the document. Sean Bothwell asked whether there were any concerns that the White Paper could divert funding from the Monitoring Council to efforts associated with the White Paper. Jon did not think that would be an issue. Sarge agreed that the scope of the White Paper falls in line with the Monitoring Council's, acting as a distillation of the Monitoring Council's message in the area of data management that would improve understanding of the issues. Others agreed. The Monitoring Council members agreed to formally endorse the White Paper.

#### **Decisions:**

The Monitoring Council members agreed to formally endorse the Environmental Data Summit White Paper

ITEM:	5	
Title of Topic:	DATA VISUALIZATION – ECOATLAS	
Purpose:	Cristina Grosso from the San Francisco Estuary Institute/Aquatic Science Center demonstrated EcoAtlas, including new enhancements, and provided an overview of its uses, future applications, and the sustainability of the tool.	
Desired Outcome:	Information and comment	
Background:	EcoAtlas was originally developed by the SFEI/ASC as a data visualization tool to track water quality certification projects in the San Francisco Bay Region. The California Wetland Monitoring Workgroup has enhanced EcoAtlas by adding a number of key features to display the quantity and quality of California wetlands, including:	
	<ul> <li>The California Aquatic Resources Inventory (CARI) base map</li> <li>Standardized wetland mapping and classification protocols</li> <li>Wetland condition information based on the California Rapid Assessment Method (CRAM)</li> <li>Wetland restoration project location, boundary and activity information</li> </ul>	
	EcoAtlas is also able to overlay other information layers, including sediment and water column toxicity data from CEDEN and land use information. The Landscape Profile Tool allows EcoAtlas to generate dynamic summaries of aquatic resource information within a user-defined area or watershed. A number of governmental and non-governmental organizations are evaluating additional applications for EcoAtlas, including tracking wetland restoration projects in the Delta and waterfowl habitat enhancements in the San Francisco Bay and Central Valley areas. Statewide water quality certification information will be delivered to EcoAtlas by an online 401 tool being developed for the State Water Board.	
Attachment Links:	<ul> <li><u>Data Visualization: EcoAtlas</u> – presentation by Cristina Grosso</li> <li><u>EcoAtlas website</u></li> </ul>	
Contact Person:	Cristina Grosso cristina@sfei.org, (510) 746-7371	
Notes:	Cristina Grosso (San Francisco Estuary Institute/Aquatic Science Center) made a presentation and a live demonstration of EcoAtlas, including its recent enhancements. For example, she described the new landscape profile tool v2, which allows users to more easily modify their area of interest and save these boundaries as KML files for use in guiding later inquiries. Cristina demonstrated the functionality of the website, and indicated that all of the work was performed using open source software. She clarified that EcoAtlas is not a database, but a map-based data visualization tool, integrating data from a variety of sources. During her presentation, Cristina also described future plans, including continuing to improve the data visualization and reporting available through EcoAtlas, develop business plans, and an EcoAtlas outreach plan. EPA has awarded funding to the Delta Conservancy and SFEI-ASC to further enhance EcoAtlas' functionality, including visualizing water quality monitoring data and habitat restoration project information in the Delta.	
	Following Cristina's demonstration, Lori Webber mentioned that the State Water Resources Control Board is developing a beneficial uses/water quality objectives	

map layer. She asked Cristina what would be the best way to incorporate these
data into EcoAtlaswould these data be in a layer, which can easily be
incorporated into EcoAtlas? Cristina said that this was correct.

ITEM:	6	
Title of Topic:	DATA VISUALIZATION – SAN JOAQUIN RIVER PORTAL	
Purpose:	Amye Osti of 34 North p	resented the recently released San Joaquin River Portal
Desired Outcome:	Information and comme	nt
Background:	Swimming safety, salmon migration and salt are some of the issues addressed by a new website launched by the Coalition for Urban/Rural Environmental Stewardship (CURES). The website links public data bases with San Joaquin River water quality information, flow, water temperature, or pesticide detections.	
	The <u>website</u> was developed by CURES with grants from the U.S. EPA and the State and Federal Contractors Water Agency (SFCWA). The website is intended to serve as an information tool for the public, water managers or researchers seeking access to data on water quality monitoring from the San Joaquin River. Aspects of the portal were adapted from Monitoring Council guidance on My Water Quality portal development.	
Attachment Links:	San Joaquin River V	Vater Quality – presentation by Amye Osti
	<ul> <li><u>CURES Launches Website on San Joaquin River Monitoring Data</u> – press release from the Coalition for Urban/Rural Environmental Stewardship</li> <li><u>San Joaquin River Portal website</u></li> </ul>	
Contact Persons:	Parry Klassen	pklassen@unwiredbb.com, (559) 646-2224
	Amye Osti	amye@34north.com, (310) 305 -8289
Notes:	Amy Osti <u>presented</u> the recently released San Joaquin River Portal. She indicated that the portal was a collaborative project between numerous organizations (CURES, SFCWA, USEPA etc.). Amy went over the portal, which uses a similar question driven approach as in the <u>MyWaterQuality</u> portals. It asks questions such as: 'is it safe to swim in the San Joaquin River?'; 'does water temperature in the San Joaquin River and its tributaries support Chinook Salmon?'; 'is salt affecting beneficial uses in the San Joaquin River Basin?'; and 'are excess nutrients a problem in the San Joaquin River?' The portal makes use of a federated system to explore and analyze data. It uses hundreds of spatial data layers, real time and discrete data parameters from disparate data sources (i.e., GIS data, CEDEC, CEDEN, USGS- NWIS etc.). Amy discussed how they plan to continue to update the portal, including adding additional data and information, as well as improved analytics.	
	incorporated for the fish added that the Data Marrepresentative Steve Goongoing issues with mal	on, Stephani Spaar asked whether BIOS was data. Amy indicated that it was not. Jon Marshack nagement Workgroup recently had a meeting with BIOS oldman; Jon indicated that there have been some king use of these datasets. When asked how much the amy indicated that it cost approximately \$30,000 from

CURES (USEPA grant) plus \$15,000 from SFCWA, plus an additional cost for maintenance. She added that the portals developed with 34 North's Open NRM technology all build on one another, so as a result, the cost to develop each one is much less than if they were starting from scratch.

ITEM:	7	
Title of Topic:	TRIENNIAL AUDIT REPORT	
Purpose:	Jon Marshack presented drafts of the first triennial audit report and cover letter to the Cal/EPA Secretary Rodriquez that have been accepted by a subcommittee of the Monitoring Council consisting of Jonathan Bishop, Paul Helliker and Sarge Green.	
Desired Outcome:	Final approval of the first triennial self-audit of implementation of the Monitoring Council's <i>Strategy</i> and a cover letter transmitting the report to the Secretary for Environmental Protection.	
Background:	SB 1070, specifically California Water Code Section 31383(h), and the MOU that created the Monitoring Council require that the Secretary of Cal/EPA, in consultation with the Secretary of the California Natural Resources Agency, conduct a triennial audit of implementing the Monitoring Council's A Comprehensive Monitoring Program Strategy for California (2010). Cal/EPA Secretary Matthew Rodriquez requested that the Monitoring Council perform a self-audit.	
	The content of this report was discussed at Monitoring Council meetings on <a href="December 12">December 12</a> , 2013, February 19, 2014, May 28, 2014, and September 3, 2014, and specific direction was given to staff. At the September 3 meeting, a subcommittee of the Monitoring Council, consisting of Co-Chairs Jonathan Bishop and Paul Helliker and Member Sarge Green, were selected to guide development of the final versions of the <a href="report">report</a> and <a href="cover letter">cover letter</a> .	
Attachment Links:	<ul> <li>Increasing Efficiency and Effectiveness Through Collaboration – presentation by Jon Marshack</li> <li>Draft of the First Triennial Audit Report, showing changes made since the September 3 meeting</li> <li>Draft of the First Triennial Audit Report, clean copy</li> <li>Draft Cover Letter to Cal/EPA Secretary Rodriquez</li> <li>Draft notes from September 3, 2014 Council meeting (see Item 4)</li> <li>Notes from May 28, 2014 Council meeting (see Item 6)</li> <li>Notes from the February 19, 2014 Monitoring Council meeting (see Item 5)</li> <li>Notes from the December 12, 2013 Monitoring Council meeting (see Item 6)</li> <li>CA Senate Bill 1070 (Statutes of 2006, specifically Water Code §13181(h))</li> <li>Memorandum of Understanding (MOU) establishing the Monitoring Council (see section IV, 4 on page 4)</li> <li>Comprehensive Monitoring Program Strategy (see page 22)</li> </ul>	

	Monitoring Council's <u>2008 Initial Recommendations</u> report (see page 11 and Appendix 3)	
Contact Persons:	Jon Marshack Kris Jones	jon.marshack@waterboards.ca.gov, (916) 341-5514 kristopher.jones@water.ca.gov, (916) 376-9756
Notes:	Jon Marshack provided a brief <u>presentation</u> describing the proposed final versions of the Triennial Audit and the cover letter to Cal/EPA Secretary Rodriquez. Following his presentation he asked the Monitoring Council whether they approved of these documents, and whether they would be willing to provide their signatures for the documents. Sarge Green indicated that he felt these documents were ready to finalize. Other's agreed and approved the final version of the report.	
	In terms of next steps, Jon indicated that the workgroups will develop business plans over the next year, which will outline each group's specific needs (e.g., staff positions, funding, etc.). The workgroups will also try to identify existing departmental mandates that can be addressed more effectively through collaborative workgroups and the <a href="MyWaterQuality">MyWaterQuality</a> portals. In addition, Jon indicated that he and Kris Jones plan to use the Triennial Audit in their outreach to managers at various agencies and programs.	
Decisions:	The Monitoring Council approved the final versions of the Triennial Audit Report and the cover letter to Cal/EPA Secretary Rodriquez.	

ITEM:	8		
Title of Topic:	NEXT MEETING AGENDA		
Purpose:	Plan agenda for February 23, 2014 Monitoring Council meeting in Sacramento. Potential items include:		
	1) Wetlands Status an	nd Trends (S&T) Program (Eric Stein)	
	2) Ocean Workgroup and Portal progress report (Liz Whiteman)		
	3) Data visualization – Bernstein)	- San Diego River report cards (Lilian Busse, Brock	
	<ol> <li>Delta Indicators for Estuary Portal (Hildie Spautz)</li> <li>Data quality standardization efforts of the Surface Water Ambient Monitoring Program (Melissa Morris)</li> <li>Stream Pollution Trends 2014 Report (Bryn Phillips, Brian Anderson)</li> <li>Business Plans from Workgroups – content and format</li> <li>Presentations from organizations within the Natural Resources agency (e.g., those identified in SB 1070) and next steps for outreach</li> <li>Possibility of holding an annual conference</li> </ol>		
Desired Outcome:	Develop agenda for the February 23 meeting		
Contact Persons:	Kris Jones	kristopher.jones@water.ca.gov, (916) 376-9756	

	Jon Marshack	jon.marshack@waterboards.ca.gov, (916) 341-5514
Notes:	The Monitoring Council expressed an interest in hearing Items (1) through (8) with Item (3) in May and Item (7) in February. Ideas from the Data Management Workgroup regarding implementation of the Environmental Data Summit white paper would be appropriate for May or August. The Monitoring Council agreed that it was too early to discuss Item (9).	
	Ken Schiff wanted to acknowledge Parry Klassen's contributions to the Monitoring Council, as this will be his last meeting as a Council Member. Jon added that he appreciated Parry's input and his perspective on issues discusse by the Monitoring Council over the years.	
Action Items:	Parry will vet his proposed replacement, Bruce Houdesheldt, with the agricultural community. Jon Marshack will then work on the nomination process with the Monitoring Council co-chairs and the agency secretaries.	

January 12, 2015 Amended January 29, 2015 Approved February 23, 2015